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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,205	11/06/2001	Hubert F. Metzger	054726-0115	1566

26371 7590 06/17/2003

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EXAMINER	
VALENTINE, DONALD R	
ART UNIT	PAPER NUMBER
1742	

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,205	METZGER, HUBERT F.	
	Examiner	Art Unit	
	Donald R. Valentine	1742	

-- The MAILING DATE of this communication app ars on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 06 November 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Polan.

Polan shows apparatus with plating tank adapted to support a cylinder in which the cylinder is partially disposed in a plating solution contained in the tank. An anode system is shown as connectable to a power source, which produces A.C. or D.C. current. (Col. 5, line 20). The anode is shown as being insoluble thus making it resilient to the plating solution. The surface of the anode material constitutes a "surface material covering at least a portion of the conductive core". An ultrasonic system to introduce wave energy is shown. See Figure 1 and col. 5, lines 5-29. See also col. 6, lines 5-15.

Statements of intended use are not given weight when considering the patentability of apparatus claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-8, 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polan in view of Fowler et al.

4. Claims 1-8, 10 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Polan as applied to claims 1 and 7 above, and further in view of Fowler et al.

Fowler et al show an anode, which has a conductive core and a surface material, which is titanium. These anodes are for electrodeposition on a cathode rotating drum (cylinder), and have various surfaces, e.g., titanium base with conductive metal oxides, etc. See col. 5, lines 5-33; col. 8, lines 8-67; and col. 9, lines 3-17.

It would be considered within the skill of the art to substitute the anode structure(s) of Fowler et al for the anode structure of Polan because Polan teaches an insoluble anode for which the Fowler et al reference appears to be a replacement and each reference provides electrodeposition on a cylindrical rotating drum cathode which, in the absence of any unexpected results, could be in the nature of applicant's rotogravure cylinder.

5. Claims 1-15 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metzger' 936 in view of Fowler et al.

Metzger '936 shows apparatus with plating tank adapted to support a cylinder (rotogravure), an anode connectable to a current source, said anode including a conductive core and a surface material resistant to the plating solution and covering at least a portion of the conductive core and an ultrasonic system with transducers to introduce wave energy into the solution in the tank.

Fowler et al show an anode, which has a conductive core and a surface material, which is titanium. These anodes are for electrodeposition on a rotating drum cathode (cylinder), and have various surfaces, e.g., titanium base with various conductive metal oxides, etc. See col. 5, lines 5-33; col. 8, lines 8-67; and col. 9, lines 3-17.

It would be considered within the skill of the art to substitute the anode structure(s) of Fowler et al for the anode structure of Metzger '936 because Metzger '936 teaches an anode resilient to the plating solution and Fowler et al teach an anode similarly resilient to the plating solution and both references utilize the anode structures to provide electrodeposition of copper on a cylindrical rotating cathode of which a rotogravure cylinder is exemplary.

6. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metzger '936 in view of Zolotarsky et al.

Metzger '936 shows apparatus with plating tank adapted to support a cylinder (rotogravure), an anode connectable to a current source, said anode including a conductive core and a surface material resistant to the plating solution. And covering at least a portion of the conductive core and an ultrasonic system with transducers to introduce wave energy into the solution in the tank.

Zolotarsky et al show a three-layer anode, which appears to be an improvement over the conventional anodes for electrodeposition of copper. (See col. 1, lines 4-15).

It would be considered within the skill of the art to substitute the anode structure with surfaces and layers as set forth by Zolotarsky et al for the structure of Metzger because the structures of Zolotarsky et al appear to be compatible with the system of Metzger and no unexpected results would be apparent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R. Valentine whose telephone number is 703-308-3327. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Donald R. Valentine
Primary Examiner
Art Unit 1742

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June 12, 2003